

EXHIBIT H

AUG. 31. 2015 3:30PM

NO. 2033 P. 6

Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

JAMIE R. WILLIAMS, PH.D.

Biomedical Engineer / Biomechanics and Bioengineering

Investigates and analyzes biomechanical and biomedical injuries; injury causation; and medical equipment, devices and implants.

Assesses Injuries: Applying physics, anatomy and physiology, assesses injuries involving:

- traumatic brain injuries and skull fractures;
- neck, back and spinal cord injuries;
- orthopedic and neurologic injuries;
- vascular ruptures;
- abdominal organs;
- heart, lungs, skin (including burns) and other organs;
- musculo-skeletal injuries including joints (i.e., shoulders, knees, ankles and elbows), soft tissues (i.e., rotator cuff, tendons and ligaments), and fracture patterns (torso, long bone, hand, foot or skull).

Determines Cause: Applying engineering principles, determines:

- the manner in which tissue failed: the type of loading, the direction of loading and magnitude or size of the load that caused the injury;
- if injury patterns are causally related or consistent with the hazardous condition or circumstances claimed;
- whether there was sufficient force in the right direction to cause an injury;
- the presence of pre-existing conditions and how they affect the injury;
- who and/or what action contributed to the injuries;
- what could have been done to prevent the injuries.

Typical Personal Injury Cases Involve:

- motor vehicle collisions;
- slips, trips and falls;
- medical malpractice or device failures;
- occupational and work place injuries;
- sports and recreational injuries.

PROFESSIONAL EXPERIENCE

2006 to present **Robson Forensic, Inc.**
 Associate

Provide technical investigations, analysis, reports, and testimony towards the resolution of personal injury litigation involving injury analysis and causation, medical equipment, medical devices, and procedures.

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JAMIE R. WILLIAMS, PH.D.

Biomedical Engineer / Biomechanics and Bioengineering

2014 to present	Messiah College, School of Science, Engineering and Health <i>Adjunct Instructor in Engineering</i>	
2005 to present	University of Illinois at Chicago, Department of Bioengineering <i>Adjunct Professor</i>	
2003 to present	Rush University Medical Center, Department of Orthopedic Surgery <i>Visiting Professor</i> <i>Assistant Director Orthopedic Biomechanics Laboratory</i> <i>Assistant Professor</i> <i>Instructor</i>	2007-present 2006-2007 2005-2007 2003-2005
1999 to 2003	Rush University Medical Center, Department of Orthopedic Surgery <i>Graduate Research Assistant</i>	
1997 to 1999	University of Iowa, Department of Biomedical Engineering <i>Research Assistant</i>	
1996 to 1999	Greenleaf Orthopedic Associates <i>Intern</i>	

EDUCATION

Ph.D., Bioengineering, University of Illinois at Chicago, Chicago, Illinois
 M.S., Bioengineering, University of Illinois at Chicago, Chicago, Illinois
 B.S.E., Biomedical Engineering, University of Iowa, Iowa City, Iowa

PROFESSIONAL MEMBERSHIPS

Orthopaedic Research Society
 New Initiatives Committee
 American Society of Mechanical Engineers
 Bioengineering Technical Division
 Association for the Advancement of Automotive Medicine
 American Society for Testing and Materials
 F-04 Medical and Surgical Materials and Devices
 F-04.02 Orthopedic Devices
 F-04.22 Arthroplasty
 F-04.25 Spinal Devices

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CERTIFICATIONS

Group Fitness Instructor, American Council on Exercise, 2005-2007
Scuba Diver, YMCA
Advanced Open Water Diver, PADI

PUBLICATIONS

- 2008 R.N. Natarajan, J.R. Williams, S.A. Lavender, H.S. An, G.B. Anderson. "Relationship Between Disc Injury and Manual Lifting: a Poroelastic Finite Element Model Study," *Proceedings of the Institution of Mechanical Engineers. Part H, Journal of Engineering in Medicine*, 222(2):195-207
- 2007 J.R. Williams, R.N. Natarajan, G.B. Andersson. "Inclusion of Regional Poroelastic Material Properties Better Predicts Biomechanical Behavior of Lumbar Discs Subjected to Dynamic Loading," *Journal of Biomechanics*. 40(9):1981-7
- 2006 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Modeling Changes in Intervertebral Disc Mechanics with Degeneration," *Journal of Bone and Joint Surgery (Am)*, Suppl 2:36-40
- 2004 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Recent Advancements in Analytical Modeling of Lumbar Disc Degeneration," *Spine*, 29(23): 2733-2741
- 2003 J.R. Williams, "Numerical Investigation of Lumbar Disc Injury Under Cyclic Loading Conditions." Doctoral Dissertation
- 2001 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Finite Element Model of a Lumbar Spinal Motion Segment to Predict Circadian Variation in Stature," *Computers & Structures*, 81(8-11): p.835-842
- 2000 J.R. Williams, "Biomechanical Response of a Lumbar Motion Segment Under Cyclic Loading," Masters Thesis

PAPERS PRESENTED AT SCIENTIFIC MEETINGS

- 2008 Y. Otuska, H.S. An, J.R. Williams, K. Yamaguchi, R.S. Ochia, G.B. Andersson, N. Inoue. "Measurement of Three-Dimensional Lumbar Facet Joint Orientation and Area: In Vivo Analysis," *Transcripts of the 39th Annual Meeting, Scoliosis Research Society*

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- 2007 R.N. Natarajan, J.R. Williams, S.A. Lavender, G.B. Andersson. "Lifting That Involves Lateral Bending of the Trunk is More Harmful to the Lumbar Disc Than That Involves Flexing or Twisting of the Trunk," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2007 R.N. Natarajan, J.R. Williams, G.B. Andersson. "Biomechanical Comparison Between Two Techniques Used in Modeling Annular Fiber in a Lumbar Motion Segment," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2007 Y. Otska, H.S. An, R.S. Ochia, J.R. Williams, G.B. Andersson, N. Inoue. "In Vivo Measurement of Lumbar Facet Surface Area," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2006 R.N. Natarajan, J.R. Williams, G.B.J. Andersson, "Numerical Model to Predict the Failure Progression in a Lumbar Disc Due to Cyclic Loading," *American Society of Mechanical Engineers, Bioengineering Division*
- 2006 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Increase in the Water Content of Degenerated Disc Tissues Does Not Restore Mechanical Response to That of a Normal Disc," *Summer Bioengineering Conference, American Society of Mechanical Engineers Bioengineering Division*
- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Comparison of the Biomechanical Response of a Lumbar Motion Segment to Loading and Unloading When Loads are Applied Suddenly and at Normal Lifting Speeds," *International Society of Biomechanics Annual Meeting*
- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Biomechanical Response of a Lumbar Motion Segment Under Physiological Loading Condition that Includes Large Shear Loads," *Summer Bioengineering Conference, American Society of Mechanical Engineers Bioengineering Division*
- 2004 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Prediction of Endplate Bulging With and Without Inclusion of Physiological Swelling Pressure and Strain Dependent Permeability and Porosity," *International Mechanical Engineering Congress and R&D Expo, American Society of Mechanical Engineers*
- 2004 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Better Understanding of Biomechanical Response of Cadaveric Lumbar Motion Segments to Creep Loading and Unloading," *International Society for the Study of the Lumbar Spine*

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Biomedical Engineer / Biomechanics and Bioengineering

- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Effect of Regional Variations in Material Properties of the Disc on Circadian Variation in Stature," *Conference Proceedings, 27th Annual Meeting of the American Society of Biomechanics*
- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Numerical Investigation of Circadian Variation in Stature," *Proceedings of the Summer Bioengineering Conference, Bioengineering Division of the American Society of Mechanical Engineers*
- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Influence of Lumbar Disc Fluid Content on Axial Disc Stiffness During Creep Loading and Unloading: A Poroelastic Finite Element Study Including the Effect of Strain Dependent Permeability and Soft Tissue Swelling," *International Society for the Study of the Lumbar Spine*
- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Change in Water Content has Greater Effect on Lumbar Disc Stiffness in Comparison to Change in Permeability," *Transactions of the 49th Annual Meeting, Orthopaedic Research Society, February, Vol. 28*
- 2002 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Numerical Investigation of Biomechanical Response of a Lumbar Motion Segment Under Repetitive Loading Conditions," *International Society for the Study of the Lumbar Spine*
- 2002 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Numerical Investigation of Circadian Variation in Stature and the Effects of Spinal Loading," *Transactions of the 48th Annual Meeting, Orthopaedic Research Society, February, Vol. 27*
- 2001 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Effect of Lifting Speed on the Biomechanical Behavior of a Lumbar Spinal Motion Segment," *Conference Proceedings, Twenty-Fifth Annual Meeting of the American Society of Biomechanics*
- 2001 Raghu N. Natarajan, Jamie R. Williams, Gunnar B.J. Andersson. "Biomechanical Response in a Lumbar Motion Segment to Dynamic Lifting Activity," *Bioengineering Conference, ASME 2001, Vol. 50*
- 2001 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Effect of Frequency of Cyclic Loading on Biomechanical Characteristics of Human Lumbar Intervertebral Joints," *International Society for the Study of the Lumbar Spine, 2001*

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Biomedical Engineer / Biomechanics and Bioengineering

FEDERAL AND NON-FEDERAL GRANTS RECEIVED

- 2006 to 2011 Intervertebral Disc Degeneration and Regeneration: Biomechanical and Biochemical Aspects; Project 2: Biomechanical Effects of Repetitive Loading on the Lumbar Motion Segment, Gunnar Andersson, M.D., Ph.D., Principal Investigator, Co-Investigator, National Institutes of Health
- 2006 to 2011 Intervertebral Disc Degeneration and Regeneration: Biomechanical and Biochemical Aspects; Project 1: Relationship Between Disc and Facet Degeneration and Lumbar Kinematics, Nozomu Inoue, M.D., Ph.D., Principal Investigator, Co-Investigator, National Institutes of Health
- 2001 to 2006 Intervertebral Disc Degeneration and Regeneration: Biomechanical and Biochemical Aspects; Project 2: Relationship Between Disc Injury and Repetitive Lifting (AR 48152-02), Gunnar Andersson, M.D., Ph.D., Principal Investigator. Graduate Student, National Institutes of Health

INDUSTRY CONTRACTS RECEIVED

- 2006 to 2007 Three-Dimensional Facet Kinematics in Healthy and Degenerated Discs in Lumbar Motion Segments, Co-Principal Investigator, Stryker
- 2006 to 2007 Endplate Microfracture Initiation of Disc Degeneration, Co-Investigator, Zimmer Spine Inc.
- 2006 to 2007 Biomechanical Comparison of C1-2 Posterior Fixation Techniques, Co-Investigator, Stryker
- 2006 to 2008 Realistic Motion and Load Input Data for Lumbar Disc Arthroplasty for the Study of Biomechanics and Wear of Artificial Discs, Co-Principal Investigator, Medtronic Sofamor Danek

SERVICE TO A PROFESSIONAL OR GOVERNMENT ORGANIZATION

- 2013 to present Orthopaedic Research Society, Reviewer
- 2013 to present Journal of Forensic Biomechanics, Reviewer

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JAMIE R. WILLIAMS, PH.D.

Biomedical Engineer / Biomechanics and Bioengineering

- 2013 to present International Journal of Biomedical Engineering and Technology, Reviewer
- 2008 to present Journal of Biomechanical Engineering, Reviewer
- 2006 Congressional Directed Medical Research Program, Peer Reviewed Military Panel (Trauma), Reviewer
- 2006 to 2007 Experimental Mechanics, Reviewer
- 2006 Judge, Ph.D. Paper Competition, American Society of Mechanical Engineers, Bioengineering Summer Conference, Amelia Island, FL
- 2005 Session Co-Chair, American Society of Mechanical Engineers, Bioengineering Summer Conference, Vail, CO
- 2004 Session Co-Chair, American Society of Mechanical Engineers, IMECE Anaheim, CA
- 2003 Session Co-Chair, American Society of Mechanical Engineers, Bioengineering Summer Conference, Key Biscayne, FL
- 2000 Local Organizing Committee, American Society of Biomechanics

INVITED LECTURES

- 2007 "A Multi-Dimensional, Multi-Disciplinary Approach to Biomaterials Science, Getting To Phase I: Preclinical Trials," *Society for Biomaterials 2007 Annual Meeting and Exposition, April 2007*
- 2006 "Finite Element Modeling of the Lumbar Spine: A Poroelastic Model Based on Mechanical and Biochemical Parameters" Japanese Orthopaedic Association, Visiting Fellows, March 2006
- 2006 "Application of Finite Element Analysis to Spine Biomechanics" Spine Biomechanics (BioE 515), Department of Bioengineering, University of Illinois at Chicago, March 2006
- 2005 "Introduction to Experimental Methods Used in Biomechanics Testing Laboratory" Spine Biomechanics (BioE 515), Department of Bioengineering, University of Illinois at Chicago, Chicago, Illinois, November 2005

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Biomedical Engineer / Biomechanics and Bioengineering

- 2005 "Introduction to Finite Element Analysis" Spine Biomechanics (BioE 515), Department of Bioengineering, University of Illinois at Chicago, Chicago, Illinois, October 2005
- 2005 "Recent Advancements in Spine Biomechanics Research" Antioch Rotary Club, Antioch, Illinois, May 2005
- 2003 "Biomechanical Behavior of the Intervertebral Disc: A Numerical Model Using Mechanically and Biologically Driven Parameters" Midwest Connective Tissue Workshop, Rush University Medical Center, Chicago, Illinois, November 2003
- 2002 "Numerical Investigation of Biomechanical Response of a Lumbar Motion Segment Under Repetitive Loading Conditions" Department of Orthopedic Surgery, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois April 2002
- 2002 "Biomechanical Response of a Lumbar Motion Segment Under Repetitive Loading Conditions: A Finite Element Study" Biomechanics Lab, Legacy Clinical Research and Technology Center, Portland, Oregon March 2002
- 2001 "Dynamic Response of a Lumbar Motions Segment to Cyclic Loading", Department of Orthopedic Surgery, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois April 2001

HONORS

- 2002 University of Illinois at Chicago: 2nd Place Sigma Xi Graduate Research Forum
- 2001 University of Illinois at Chicago Student Travel Award
- 2000 Who's Who among America's College and Universities
- 1999 Rush-Presbyterian-St. Luke's Medical Center: Thomas Andriacchi Endowment Scholarship Recipient
- 1999 University of Iowa: College of Engineering Outstanding Graduating Senior Award
- 1995 to 1999 Clara Abbott Foundation Educational Scholarship, Abbott Laboratories

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Biomedical Engineer / Biomechanics and Bioengineering

TEACHING

- 2015 Biomedical Engineering Design (ENGR 410), Department of Engineering, Messiah College School of Science, Engineering and Health
- 2014 Mechanics of Materials (ENGR 333), Department of Engineering, Messiah College School of Science, Engineering and Health
- 2006 Soft Tissue Biomechanics (BioE 494), Department of Bioengineering, University of Illinois at Chicago, *Developed course for undergraduate and graduate bioengineering students*

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PUBLICATION LIST
JAMIE R. WILLIAMS, PH.D.

Papers in Refereed Journals

- In **J.R. Williams, R.M. Urban, R. S. Ochia, N. Inoue, "Modified Specimen**
 Prep **Preparation and Testing Methods Restore Fluid In-Flow to In Vitro Intervertebral**
 Discs," to be submitted
- In **J.R. Williams, R.N. Natarajan, G.B.J. Andersson. "Better Understanding of**
 Prep **Biomechanical Response of Human Cadaveric Lumbar Motion Segments to**
 Creep Loading and Unloading," to be submitted
- 2008 R.N. Natarajan, **J.R. Williams, S.A. Lavender, G.B.J. Andersson, "Relationship**
 Between Disc Injury and Manual Lifting – A Poroelastic Finite Element Study,"
 Proceedings of the Institution of Mechanical Engineering Journal of
 Engineering in Medicine 222(2): p.195-207
- 2007 **J.R. Williams, R.N. Natarajan, G.B.J. Andersson. "Inclusion of Regional**
 Poroelastic Material Properties Better Predicts Biomechanical Behavior of
 Lumbar Discs Subjected to Dynamic Loading," *Journal of Biomechanics* 40(9):
 1981-1987
- 2006 R.N. Natarajan, **J.R. Williams, G.B.J. Andersson. "Modeling Changes in**
 Intervertebral Disc Mechanics with Degeneration," *Journal of Bone and Joint*
 Surgery (Am), Suppl 2:36-40
- 2004 R.N. Natarajan, **J.R. Williams, G.B.J. Andersson. "Recent Advancements in**
 Analytical Modeling of Lumbar Disc Degeneration," *Spine*, 29(23): 2733-2741
- 2001 R.N. Natarajan, **J.R. Williams, G.B.J. Andersson. "Finite Element Model of a**
 Lumbar Spinal Motion Segment to Predict Circadian Variation in Stature,"
 Computers & Structures, 81(8-11): p.835-842

Papers Presented at Scientific Meetings

- 2008 Y. Otsaka, H. An, **J.R. Williams, K. Yamaguchi, R.S. Ochia, G.B.J. Andersson,**
 N. Inoue "Measurement of Three-Dimensional Lumbar Facet Joint Orientation
 and Area; In Vivo Analysis," *Transactions of the 39th Annual Meeting, Scoliosis*
 Research Society
- 2007 Y. Otsaka, H. An, R.S. Ochia, **J.R. Williams, K. Yamaguchi, G.B.J. Andersson,**
 N. Inoue "In Vivo Measurement of Three-Dimensional Facet Joint Orientation,"
 Transactions of the 53rd Annual Meeting, Orthopaedic Research Society

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PUBLICATION LIST
JAMIE R. WILLIAMS, PH.D.

- 2007 K. Yamaguchi, H. An, R.S. Ochia, J.R. Williams, G.B.J. Andersson, N. Inoue "Instant Axes of Rotation of the Lumbar Spine During Torsion," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2007 R.N. Natarajan, J.R. Williams, G.B.J. Andersson "Biomechanical Comparison Between Two Techniques Used in Modeling Annular Fiber in a Lumbar Motion Segment," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2007 R.N. Natarajan, J.R. Williams, S. A. Lavender, G.B.J. Andersson "Lifting That Involves Lateral Bending of the Trunk is More Harmful to the Lumbar Disc Than That Which Involves Flexing or Twisting of the Trunk," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2007 Y. Otsaka, H. An, R.S. Ochia, J.R. Williams, G.B.J. Andersson, N. Inoue "In Vivo Measurement of Lumbar Facet Surface Area," *Transactions of the 53rd Annual Meeting, Orthopaedic Research Society*
- 2006 J.R. Williams, R. S. Ochia, G.B.J. Andersson, "Modified Specimen Preparation and Testing Methods Restore Fluid In-Flow to In Vitro Intervertebral Discs," *Summer Bioengineering Conference, American Society of Mechanical Engineers Bioengineering Division*
- 2006 R.N. Natarajan, J.R. Williams, G.B.J. Andersson, "Numerical Model to Predict the Failure Progression in a Lumbar Disc Due to Cyclic Loading," *American Society of Mechanical Engineers, Bioengineering Division*
- 2006 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Increase in the Water Content of Degenerated Disc Tissues Does Not Restore Mechanical Response to That of a Normal Disc," *Summer Bioengineering Conference, American Society of Mechanical Engineers Bioengineering Division*
- 2006 R.N. Natarajan, J.R. Williams, G.B.J. Andersson, "Predictions of Failure Progression in a Lumbar Disc Due to Cyclic Loading: A Finite Element Study," *International Society of Biomechanics Annual Meeting*
- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Comparison of the Biomechanical Response of a Lumbar Motion Segment to Loading and Unloading When Loads are Applied Suddenly and at Normal Lifting Speeds," *International Society of Biomechanics Annual Meeting*
- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Comparison of the Biomechanical Response of a Lumbar Motion Segment to Loading and Unloading When Loads are Applied Suddenly and at Normal Lifting Speeds," *International Society of Biomechanics Annual Meeting*

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NO. 2033 P. 17

**PUBLICATION LIST
JAMIE R. WILLIAMS, PH.D.**

- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Biomechanical Response of a Lumbar Motion Segment Under Physiological Loading Condition that Includes Large Shear Loads," *Summer Bioengineering Conference, American Society of Mechanical Engineers Bioengineering Division*
- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Lumbar Intervertebral Disc Does Not Recover From In Vitro Loading Because of Restricted Fluid Flow," *International Society for the Study of Lumbar Spine*
- 2005 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Disc Stiffness is Positively Correlated to Cyclic Loading Magnitude in a Healthy Disc While it is Negatively Correlated in a Degenerated Disc," *Transactions of the 51st Annual Meeting, Orthopaedic Research Society*
- 2004 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Prediction of Endplate Bulging With and Without Inclusion of Physiological Swelling Pressure and Strain Dependent Permeability and Porosity," *International Mechanical Engineering Congress and R&D Expo, American Society of Mechanical Engineers*
- 2004 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Better Understanding of Biomechanical Response of Cadaveric Lumbar Motion Segments to Creep Loading and Unloading," *International Society for the Study of the Lumbar Spine*
- 2004 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Inclusion of Regional Variations in the Poroelastic Material Properties of the Lumbar Disc Better Predicts the Change in Disc Height During Both Long Term and Short Term Loadings," *Transactions of the 50th Annual Meeting, Orthopaedic Research Society, February, Vol. 29*
- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Effect of Regional Variations in Material Properties of the Disc on Circadian Variation in Stature," *Conference Proceedings, 27th Annual Meeting of the American Society of Biomechanics*
- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Numerical Investigation of Circadian Variation in Stature," *Proceedings of the Summer Bioengineering Conference, Bioengineering Division of the American Society of Mechanical Engineers*
- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Influence of Lumbar Disc Fluid Content on Axial Disc Stiffness During Creep Loading and Unloading: A Poroelastic Finite Element Study Including the Effect of Strain Dependent Permeability and Soft Tissue Swelling," *International Society for the Study of the Lumbar Spine*

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PUBLICATION LIST
JAMIE R. WILLIAMS, PH.D.

- 2003 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Change in Water Content has Greater Effect on Lumbar Disc Stiffness in Comparison to Change in Permeability," *Transactions of the 49th Annual Meeting, Orthopaedic Research Society, February*, Vol. 28
- 2002 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Numerical Investigation of Biomechanical Response of a Lumbar Motion Segment Under Repetitive Loading Conditions," *International Society for the Study of the Lumbar Spine*
- 2002 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Numerical Investigation of Circadian Variation in Stature and the Effects of Spinal Loading," *Transactions of the 48th Annual Meeting, Orthopaedic Research Society, February*, Vol. 27
- 2001 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Effect of Lifting Speed on the Biomechanical Behavior of a Lumbar Spinal Motion Segment," *Conference Proceedings, Twenty-Fifth Annual Meeting of the American Society of Biomechanics*
- 2001 Raghu N. Natarajan, Jamie R. Williams, Gunnar B.J. Andersson. "Effect of Frequency of Cyclic Loading on Biomechanical Properties of Lumbar Intervertebral Joints," *Advances in Bioengineering, ASME 2001*, Vol. 51
- 2001 Raghu N. Natarajan, Jamie R. Williams, Gunnar B.J. Andersson. "Biomechanical Response in a Lumbar Motion Segment to Dynamic Lifting Activity," *Bioengineering Conference, ASME 2001*, Vol. 50
- 2001 R.N. Natarajan, J.R. Williams, G.B.J. Andersson. "Effect of Frequency of Cyclic Loading on Biomechanical Characteristics of Human Lumbar Intervertebral Joints," *International Society for the Study of the Lumbar Spine, 2001*
- 2001 J.R. Williams, R.N. Natarajan, G.B.J. Andersson, "Dynamic Response of a Lumbar Motion Segment to Various Rates of Loading," *Transactions of the 47th Annual Meeting, Orthopaedic Research Society, February 2001*, Vol. 26
- 2000 Jamie L. Ryan, Raghu N. Natarajan, G.B.J. Andersson, "Relationship between Rate of Loading and Dynamic Response Including Failure Initiation in a Lumbar Motion Segment," *Conference Proceedings, Twenty-Fourth Annual Meeting of the American Society of Biomechanics, 2000*.

TESTIMONY
JAMIE R. WILLIAMS, PH.D.

Scott Ayre vs. Ritz Camera Centers Inc. and Earth Ocean Sports Inc.
Superior Court, Cumberland County Maine
Philadelphia, PA
05NE0154 - Plaintiff-Civil-depo

John Seals vs. County of Morris et al.
Superior Court of New Jersey Law Division Morris County
Morristown, NJ
06JN0151 - Defense-Civil-depo

State and County Mutual Fire Insurance Company vs. William Prentice Young
United States District Court for the Northern District of West Virginia at Martinsburg
Morgantown, WV
07WV0008 - Plaintiff-Civil-depo

Edward Brooks vs. II Stanley Co., Inc. and Manpower of Lansing Michigan, Inc.
State of Michigan in the Circuit Court for the County of Calhoun, 37th Judicial Court
Harrisburg, PA
08MY0061 - Defense-Civil-depo

Tony M. Mastromatteo and Stella Munoz-Rodriguez vs. Cory A. Wiland
Summit County Common Pleas Court
Akron, OH
06BE0196 - Plaintiff-Civil-trial

John W. Glowacki vs. Fulmer Helmets Inc.
United States District Court for the District of New Jersey
Vineland, NJ
02JS0144 - Plaintiff-Civil-depo

Raymond Wood and Joyce Wood vs. Richard Green and Automotive Rentals Inc. et al.
Superior Court of New Jersey Law Division - Gloucester County
Woodbury, NJ
04JS0191 - Defense-Civil-arbitration

Estate of Greer F. Henderson, Barbra E. Henderson, Kathleen E. Mastrangelo, Richard J. Matrangelo vs. Gemini
Limousine LTD., Krystal Coach Inc. et al.
Superior Court Law Division Union County
Elizabeth, NJ
03JN0138 - Plaintiff-Civil-trial

John A Terranova, the Administrator of the Estate of Nicholas Terranova v. New York State Trooper Raphael Torres,
New York State Trooper Aaron Riley and New York State Trooper Kevin Quintero
United States District Court Southern District of New York
New York, NY
07BA0077 - Plaintiff-Civil-depo

Reverend Reginald Woodard and Pamela Woodard vs. Davol Inc., Washington Hospital Center Corp., John D. Butler,
Jr., M.D., and John Does, Agents and/or Employees, Inc., et al.
Superior Court of the District of Columbia
Washington, D.C.
07FE0321 - Plaintiff-Civil-depo

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TESTIMONY
JAMIE R. WILLIAMS, PH.D.

Kelth Phaneuf v. William Berselli, D/B/A, et al.
 Superior Court – Judicial District of Tolland at Rockville
 Lancaster, PA
 04NE0157 – Plaintiff-Civil-depo

Michael Velez v. New York City Transit Authority
 Supreme Court of the State of New York
 County of Queens
 Long Island City, NY
 07BA0289 – Plaintiff-Civil-trial

Victor Guevara v. Michael Reichbach
 Circuit Court for Montgomery County, Maryland
 Lancaster, PA
 08FE0022 – Plaintiff-Civil-depo

John Valentin v. County of Suffolk, et al
 United States District Court
 Eastern District of New York
 Central Islip, NY
 07BA0331 – Plaintiff-Civil-trial

David Haas and Lisa Haas v. Endeavor Mold and Design
 Court of Common Pleas Philadelphia County
 Philadelphia, PA
 08PH0006 – Defense-Civil-trial

Kelth Phaneuf v. William Berselli d/b/a Berselli Trucking, et al
 Superior Court – Judicial District of Tolland at Rockville
 Rockville, CT
 04NE0157 – Plaintiff-Civil-trial

Michael Osborn, Sr., Michelle Osborn, Michael Osborn, Jr. and Ashley Osborn, by her Guardian AD Litem, Michael Osborn v. Daimler Chrysler, Dodge Motor Company, Chrysler Motor Company, et als.
 Superior Court of New Jersey – Law Division Essex County
 Union, NJ
 06BA0256 – Plaintiff-Civil-depo

Leland Garner v. Nationwide Insurance Company
 Superior Court of California, County of Stanislaus
 Harrisburg, PA
 07FE0399 – Plaintiff-Civil-depo

Richard Hunt v. Mark Larbalestrier, Sean Ruff and John Does 1-10
 Superior Court of New Jersey Law Division – Essex County
 Harrisburg, PA
 08JN0084 – Plaintiff-Civil-depo

Grace Barcliff as guardian ad litem for Craig Odem, and Grace Barcliff, individually; Craig Odem v. Bond Brothers; Bond Brothers Transportation; Michael Bone; Gerald Brock; Nussbaum Sales Corp; Ford Motor Company
 Superior Court of New Jersey Law Division – Middlesex County
 Lancaster, PA
 06BA0385 – Plaintiff-Civil-depo

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TESTIMONY

JAMIE R. WILLIAMS, PH.D.

Emilio D'Ascanio et al. v. Toyota Industries Corp., et al.
Superior Court of J.D. of Hartford at Hartford
Lancaster, PA
04NE0175 – Plaintiff-Civil-depo

Calvin and Karen Timberlake v. Synthes Spine, Inc. and Synthes North America, Inc.
U.S. District Court for the Southern District of Texas – Victoria Division
Lancaster, PA
08FE0405 – Plaintiff-Civil-depo

John A Terranova, the Administrator of the Estate of Nicholas Terranova v. New York State Trooper Raphael Torres,
New York State Trooper Aaron Riley and New York State Trooper Kevin Quintero
United States District Court Southern District of New York
White Plains, NY
07BA0077 – Plaintiff-Civil-trial

Kelia Cengiz v. Yucel Cengiz, Duong D. Tran, PAC Automotive LLC and John Does 1-5
Superior Court of New Jersey Law Division – Monmouth County
Lancaster, PA
09JN0022 – Defense-Civil-depo

Jeanette C. Sarver, executor and Personal Representative of the Estate of Barry E. Sarver, Deceased v. B. Joseph
Prud'Homme, M.D., and Orthopedic Surgery of Virginia, Inc., et al.
Virginia, In the Circuit Court for the County of Montgomery
Ephrata, PA
07VA0015 – Plaintiff-Civil-depo

Edward J. Renauer, Sr., et al., v. Discovery Creek Children's Museum of Washington, Inc., et al.
United States District Court for the District of Maryland (Southern Division)
Baltimore, MD
07FE0138 – Plaintiff-Civil-depo

Carol Polak-Reid v. Nationwide Bowling Corp., Bowler City, et al.
Superior Court of New Jersey Law Division: Bergen County
Fort Lee, NJ
10JN0015 – Plaintiff-Civil-depo

Deirdre Gullbault, a minor through her mother and next friend, Julie Gullbault v. Ronald P. Forget D/B/A Breezy Picnic
Grounds Waterslides
Superior Court Judicial District of Tolland at Rockville
Lancaster, PA
09CT0015 – Plaintiff-Civil-depo

Benjamin Jantzen v. Air Zone, Inc. (Delaware), Air Zone, Inc. (California), Bravo Sports, et al.
Circuit Court of Cook County, Illinois County Department, Law Division
Lancaster, PA
10LL0022 – Defendant-Civil-depo

Martha G. Schwarzkopf, Steve McCandlish and Sara McCandlish v. Ronald M. Kristensen, M.D., Benjamin T. Kerns,
P.A., Benjamin J. Hochhalter, P.A., Orthopedic Centers of Idaho, P.A., Biomet Inc., EBI, L.P, EBI Medical Systems,
Inc.
District Court of the Fourth Judicial District of the State of Idaho, In and For the County of Ada
Boise, ID
10FE0100 – Plaintiff-Civil-depo

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TESTIMONY**JAMIE R. WILLIAMS, PH.D.**

Mandy Mensinger and Gary Mensinger, Parents and Natural Guardian of Connor Mensinger, a Minor v. Dorel Juvenile Group, Inc.

United States District Court for the Middle District of Pennsylvania

Lancaster, PA

10PH0070 – Plaintiff-Civil-depo

Steven Duff Madsen and Arlene Madsen v. Davol, Inc., C.R. Bard, Inc., Atrium Medical Corporation, et al.

Superior Court of the State of Arizona in and for the County of Maricopa

Lancaster, PA

10MY0018 – Plaintiff-Civil-depo

Cora L. Wandel v. Kevin Dockett & Sons Trucking, Inc., et al.

United States District Court for the District of Columbia

Washington, DC

10FE0018 – Plaintiff-Civil-trial

George Avirappattu and Jaya George as parents and natural guardians of Jacob George, a minor George Avirappattu and Jaya George in their own right v. Missionary Servants of the Most Holy Trinity, et al.

Superior Court of New Jersey Law Division – Somerset County

Lancaster, PA

11PH0018 – Plaintiff-Civil-depo

Virginia Schuster and Victor Schuster v. Congress Hall Hotel, Cape Resorts Group, et al.

United States District Court for the District of New Jersey

Lancaster, PA

10BA0117 – Defense-Civil-depo

Darlene C. Robinson v. Washington Metropolitan Area Transit Authority

United States District Court for the District of Columbia

Lancaster, PA

11FE0810 – Plaintiff-Civil-depo

Ricardo Casusol and Vilma Casusol v. Simone A. Frederick etc., et al

Superior Court of New Jersey Law Division: Bergen County

Teaneck, NJ

09JN0109 – Plaintiff-Civil-depo

Michael Brocato, et al. v. Hyundai Motor America

Circuit Court for Baltimore of the State of Maryland

Lancaster, PA

10FE0481 – Plaintiff-Civil-depo

McIntyre v. Antoine

Court of Common Pleas of Lackawanna County

Scranton, PA

10FE0473 – Plaintiff-Civil-arbitration

Ken Wilson v. United States of America c/o United States Attorney's Office and TFO Jason Player

United States District Court for the District of New Jersey

Lancaster, PA

11JN0109 – Defense-Civil-depo

Raymond Alvarado v. Festival Fun Parks, LLC., d/b/a/ Water Country

State of New Hampshire, Rockingham, Superior Court

Brentwood, NH

10NE0094 – Defense-Civil-trial

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TESTIMONY

JAMIE R. WILLIAMS, PH.D.

Darlene C. Robinson v. Washington Metropolitan Area Transit Authority
 United States District Court for the District of Columbia
 Washington DC
 11FE0810 – Plaintiff-Civil-trial

William Luyke v. Mark Brinkley, Dean Trivisani, J&S Enterprises LLC, The Sports Factory, Wildcats Winter Team Mens
 Over 40 League, et als.
 Superior Court of New Jersey Law Division: Bergen County
 Lancaster, PA
 10JN0162 – Plaintiff-Civil-depo

Rodney Hampton, Sr., et al. v Woodlawn Motor Coach, et al,
 Circuit Court for Baltimore County, Maryland
 Lancaster, PA
 12FE0867 – Plaintiff-Civil-depo

Kelia Cengiz v. Yucel Cengiz, Duong D. Tran, PAC Automotive LLC and John Does 1-5
 Superior Court of New Jersey Law Division – Monmouth County
 Lancaster, PA
 09JN0022 – Defense-Civil-trial

David Matthews v. Whitewater West Industries, LTD., HKS Inc. d/b/a HKS Architects, EDSA, Inc, f/k/a Edward D.
 Jones and Associates, Inc., Cloward H2O LLC f/k/a, Cloward & Associates, PC
 In the United States District Court of the Southern District of Florida, Miami Division
 Philadelphia, PA
 12MY0019 – Plaintiff-Civil-depo

Erica Bernard v. Maria Elena's Enterprises, LLC d/b/a Master Parking, a Florida corporation, and Robert Morales,
 individually
 Circuit Court of the 11th Judicial Circuit in and for Miami-Dade County, Florida, General Jurisdiction Division
 Lancaster, PA
 13SS0023 – Plaintiff – Civil – depo

Mary Jo Barnes v. Merck Sharp & Dohme Corp, et al.
 Circuit Court of Montgomery County, Alabama
 Lancaster, PA
 13SS0027 – Plaintiff – Civil – depo

Mark Kresich v. City of Lake Station, Officer Wendell Hite, Officer Michael Smith, Officer John McDaniel and Officer
 Christopher Purser
 United States District Court for the Northern District of Indiana, Hammond Division
 Lancaster, PA
 12LL0049 – Defense – Civil – depo

Sharon and Stephen Ehele v. Anthony J. Kwon, M.D., Novant Medical Group, Inc. d/b/a Total Spine Specialists, and
 Total Spine Specialists
 State of North Carolina County of Mecklenburg General Court of Justice Superior Court Division
 Lancaster, PA
 12SC0050 – Plaintiff – Civil – depo

Matthew and Korrin Seavey v. Globus Medical, Inc., Mark A. Testaiuti, M.D., Costal Spine, P.C. and Fellowship Spine
 Surgery Center
 In the United States District Court for the District of New Jersey
 Lancaster, PA
 12PH0138 – Plaintiff – Civil – depo

TESTIMONY
JAMIE R. WILLIAMS, PH.D.

Mark Kresich v. City of Lake Station, Officer Wendell Hite, Officer Michael Smith, Officer John McDaniel and Officer Christopher Purser
United States District Court for the Northern District of Indiana, Hammond Division
Lancaster, PA
12LL0049 – Defense – Civil – hearing

Heeoon Han and Young Eun Lee, et al. v. Ford Motor Company
United States District Court for the Eastern District of Pennsylvania
Lancaster, PA
10PH0130 – Plaintiff – Civil – depo

Lucious S. Light v. Brabham Oil Company, Inc. dba E-Z Shop #23
Court of Common Pleas, State of South Carolina, County of Orangeburg
Lancaster, PA
13SC0099 – Plaintiff – Civil – depo

Don and Mindalyn Enlow v. Layne Kamalu, M.D., Kaysville Clinic, LLC., Jeneta Richardson, and Lumenis, Inc.
In the Second Judicial District Court, State of Utah, Davis County
Lancaster, PA
13RM0006 – Plaintiff – Civil – depo

Estate of Ronald Walsh v. 62 SGAC, Inc. d/b/a Incredible Events
In the Circuit Court of Madison County, State of Illinois
Lancaster, PA
14SS0080 – Plaintiff – Civil – depo

Emilio D'Ascanio v. Toyota Industries Corp.
Superior Court, Judicial District of Hartford
Hartford, CT
14CT0025 – Plaintiff – Civil – trial

Heeoon Han and Young Eun Lee, et al. v. Ford Motor Company
United States District Court for the Eastern District of Pennsylvania
Philadelphia, PA
10PH0130 – Plaintiff – Civil – trial

Burt Holt v. Amarild Ushe, Reliable Transport Services, LLC and Container Port Group, Inc.
In the Circuit Court for the County of Wayne, State of Michigan
Lancaster, PA
14MY0006 – Plaintiff – Civil – depo

John A. Cancelleri and Rosetta Cancelleri, His Wife, v. Ford Motor Company, et al.
In the Court of Common Pleas, Lackawanna County, State of Pennsylvania
Scranton, PA
11FE0436 – Plaintiff – Civil – trial

The People of the State of New York v. Troy A. Daggett
State of New York, County of Steuben, County Court
Bath, NY
13WN0022 – Defense – Criminal – trial

Glen Armstrong, Sr. v. BNSF Railway Company, et al.
United States District Court for the Northern District of Illinois
Lancaster, PA
14LL0084 – Plaintiff – Civil – depo

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TESTIMONY
JAMIE R. WILLIAMS, PH.D.

The People of the State of New York v. Mellissia Vincent
 State of New York, Fulton County Court
 Johnstown, NY
 14AL0044 – Defense – Criminal – trial

Estate of Ronald Walsh v. 62 SGAC, Inc. d/b/a Incredible Events
 In the Circuit Court of Madison County, State of Illinois
 Edwardsville, IL
 14SS0080 – Plaintiff – Civil – trial

Shirley Richardson v. Claudia Lipari, et al.
 Superior Court of New Jersey Law Division, Burlington County
 Lancaster, PA
 14JS0089 – Plaintiff – Civil – depo

Aleia Shipman v. Alabama Janitorial Services, Inc., et al.
 In the Circuit Court of Jefferson County, Alabama, Birmingham Division
 Lancaster, PA
 14SS0027 – Defense – Civil – depo

Mark Kresich v. City of Lake Station, Officer Wendell Hite, Officer Michael Smith, Officer John McDaniel and Officer Christopher Purser
 United States District Court for the Northern District of Indiana, Hammond Division
 Hammond, IN
 12LL0049 – Defense – Civil – trial

Richard and Jennifer Bidlake v. Gina Furco, R.N., Naresh Aeteli, P.T., Crouse Hospital, EBI, L.L.C., Frederick Lemley, M.D. and Syracuse Orthopedic Specialists, P.C.
 New York Supreme Court, City of Onondaga
 Syracuse, NY
 12WN0034 – Plaintiff – Civil – trial

Estate of Chad Fleager v. Pitt Ohio Express, LLC
 In the Circuit Court of Cook County, Illinois
 Lancaster, PA
 13LL0002 – Plaintiff – Civil – depo

Burt Holt v. Amarild Ushe, Reliable Transport Services, LLC and Container Port Group, Inc.
 In the Circuit Court for the County of Wayne, State of Michigan
 Detroit, MI
 14MY0006 – Plaintiff – Civil – trial

Estate of Christopher Zerby v. State of NJ, et al.
 Superior Court of New Jersey, Mercer County
 Lawrenceville, NJ
 12JS0075 – Plaintiff – Civil – depo

Amanda Day v. Archdiocese of Philadelphia
 In the Court of Common Pleas of Philadelphia County, PA
 Philadelphia, PA
 14PH0144 – Plaintiff – Civil – arbitration